CLAIMS

1. A metal halide lamp comprising:

an arc tube made of translucent ceramic and having a main tube part in which a pair of electrodes are disposed; and

an outer tube housing the arc tube therein, wherein

$4.0 \leq L/D \leq 10.0$, where L is a length of a space between the electrodes and D is an internal diameter of the main tube part,

$R/r \geq 3.4$, where R is an internal diameter of the outer tube and r is an external diameter of the main tube part, within a region positionally corresponding to, in a radial direction of the outer tube and the arc tube, the space between the electrodes, on a cross-sectional surface where an outer circumference of the arc tube comes closest to an inner circumference of the outer tube, and

$M \leq 4.0$, where M (mg/cc) is a density of mercury enclosed in the arc tube.

2. The metal halide lamp of Claim 1, wherein

$R/r \leq 7.0$.

3. The metal halide lamp of Claim 1, wherein

a sodium halide and at least one of a cerium halide and a praseodymium halide are enclosed in the arc tube.

4. The metal halide lamp of Claim 2, wherein

a sodium halide and at least one of a cerium halide and a praseodymium halide are enclosed in the arc tube.

5. The metal halide lamp of Claim 1, wherein

a degree of vacuum inside the outer tube is no more than 1×10^3 Pa at 300 K.

6. The metal halide lamp of Claim 4, wherein

a degree of vacuum inside the outer tube is no more than 1×10^3 Pa at 300 K.

7. The metal halide lamp of Claim 1, wherein

An external surface of the arc tube directly faces an internal surface of the outer tube.

8. A luminaire comprising:

a metal halide lamp recited in one of Claims 1 to 7; and

a lighting circuit for illuminating the metal halide lamp.